

ABSTRACT OF THE DISCLOSURE

An apparatus Apparatus and method for electrically connecting two closely positioned high voltage modules with little or no bend and without any loops in an electrical interconnecting coaxial cable, ~~is disclosed, which~~ may ~~comprise~~ have a high voltage connector attached to at least a portion of the cable on at least one end of the cable; a push through high voltage connector receptor within one module; and a disconnection mechanism within the one module adapted to move the high voltage connector and ~~the~~ at least a portion of cable to which the high voltage connector is attached through the connector receptor from a contact position to a housed position in a direction away from the other module to which high voltage connection is to be made. The ~~high voltage~~ connector receptor may ~~comprise~~ have an open cylindrical connector with a contacting surface contained on the interior wall of the cylindrical connector and an interlock mechanism. ~~The apparatus may further comprise an interlock mechanism in operative connection with the disconnection mechanism and adapted to provide an indication of the high voltage connector being in a position other than in the contact position relative to the connector receptor, and an engaging mechanism engaging the cable and holding the cable in a fixed position relative to the disconnection mechanism as the high voltage connector moves between the contact position and the housed position. The apparatus may further comprise a clamping mechanism in cooperative connection with the disconnection mechanism when the high voltage connector is in the contact position and cooperative with the clamping mechanism to prevent the high voltage connector from moving from the contact position. The invention may also include a retractable connector within a second module moveable toward the first module from a retracted position into an extended position, in which extended position electrical contact is made with the second high voltage connector.~~